UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,808	10/16/2003	Do Nyun Kim	HI-0181	5133

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>13 August 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>06 October 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/22/06</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   This action is responsive to communications: Election filed on 8/13/07.

2.   Claims 1 – 19 are pending in the case. Claims 1 and 17 are independent.

Election/Restrictions

3.   Applicant's election with traverse of claims 1 – 16 in the reply filed on 8/13/07 is

acknowledged. Applicant's arguments have been fully considered and are persuasive.

The requirement for restriction is withdrawn in whole and claims 17 – 19 have been

rejoined.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1 – 19 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

6.   Claims 1 – 19 recite an algorithm or abstract idea employed in a process that is

not embodied in, operates on, transforms, or otherwise involves another class of

statutory subject matter, i.e., a machine, manufacture, or composition of matter. In

Diehr, the Supreme Court confirmed that a process claim reciting an algorithm could

state statutory subject matter if it: (1) is tied to a machine or (2) creates or involves a

composition of matter or manufacture.12 450 U.S. at 184.

For example, processes involving mathematical algorithms used in computer

technology are patentable because they claim practical applications and are tied to

specific machines. However, mental processes or processes of human thinking

standing alone are not patentable even if they have practical application. In other words,

claimed systems that depend for their operation on human intelligence alone does not

constitute patentable subject matter. See In Re Stephen W. Comiskey, 2006-1286, *17 -

21, (Fed. Cir., September 20, 2007) for further analysis and the basis for this rejection.

7.   Further, to expedite a complete examination of the instant application, the claims

rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth

below in anticipation of applicant amending these claims to make them statutory.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9.   Claims 1, 7, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated

by Chang et al. (US 20020138495A1).

10.   **Regarding independent claim 1**, Chang et al. teach that the method for

configuring a new DIGITAL ITEM by selecting a DIGITAL ITEM using the designated

CONDITION based on the PRECEDENCE of the user's choice is very useful

(paragraph block 0113), which meet the limitation of **applying a "ChoicePrecedence"**

to an input DID instance document;

Chang et al. teach that using the designated CONDITION based on the

PRECEDENCE of the user's choice is very useful for representing the CONDITION

more effectively. In this manner, the user is now able to generate a new DIGITAL ITEM

using the DIGITAL ITEM that satisfies the designated CONDITION (paragraph block

0113), which meet the limitation of **modifying a corresponding "ChoicePrecedence"**

of the input DID instance document in an order designated in the

"ChoicePrecedence"; and

Chang et al. teach that using the above DIGITAL ITEM generation method, a

new DIGITAL ITEM can be generated by combining selected DIGITAL ITEMs

(paragraph 0109 and Fig. 10 & S19), which meet the limitation of **generating a**

rearranged DID instance document.

It should be noted that Fig 3 illustrates DIGITAL ITEMs being generated in XML,

i.e. ALBUM.XML, ITEM1.XML, ITEM2.XML, ITEM3.XML, which meet the claimed DID

instance document.

11.   **Regarding dependent claim 7**, Chang et al. teach that since the size of the

communication speed of the user in the first CHOICE is comparable with others, it is

defined with the PRECEDENCE (paragraph block 0082), which meet the limitation of

the "ChoicePrecedence" applies a "SpecifiedPrecedence".

12.   **Regarding dependent claim 9**, Chang et al. teach that using the

PRECEDENCE, the CONDITION for a comparison is set (S13). The CONDITION is set

for a DIGITAL ITEM or COMPONENT, and `OP` can be used therefore. Thus, the

CONDITION can be EG (equal to) (paragraph block 0105), which meet the limitation of

the "ChoicePrecedence" is designated as an absolute precedence.

13.   **Regarding dependent claim 10**, Chang et al. teach that if. . . SELECT

ID="MBPS52" is selected out of the first CHOICE, the MPEG2 format can be selected at

the PRECEDENCE greater than 8000000 because of <SELECTION

SELECT_ID="MPEG2_FORMAT">, and <CONDITION OP="GE" REQUIRE="MBPS8">

of the second CHOICE (paragraph block 0099), which meet the limitation of **the**

"ChoicePrecedence" is designated as one of a "First" precedence, a "Second"

precedence, a "Third" precedence and a "Last" precedence.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

15.   Claims 2, 3, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Chang et al. (US 20020138495A1) as applied to claim 1 above, and further in view

of Song et al. (US 20020095429 A1).

16.   **Regarding dependent claim 2**, Chang et al. do not explicitly teach **a process of**

inserting a DIAinDID descriptor into the DID instance document is preceded so as

to make it possible to modify the input DID instance document adaptably, wherein

the DIAinDID represents a corresponding choice.

Song et al. teach that this choice is used for item 104 level for the purpose of selective item configuration in order to adapt the Digital Item according to the various types of networks and terminals, or the user request. Since the user generally can configure item through multi-steps, so layered definition of choice is required. This choice is modeled in a recurrent form (paragraph block 0077), which meet the limitation of **a process of inserting a DIAinDID descriptor into the DID instance document is preceded so as to make it possible to modify the input DID instance document adaptably, wherein the DIAinDID represents a corresponding choice.**

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Chang et al. with that of Song et al. because such a combination would provide the users of Chang et al. with a Digital Item definition model with flexibility, consistency and compatibility required in the electronic commerce environment (paragraph block 0010).

17.   **Regarding dependent claim 3,** Chang et al. do not explicitly teach **the DIAinDID descriptor includes a "TargetChoice" and a target choice condition.**

Song et al. teach that Choice 104b is used for item 104 level required for selective configuration satisfying a request of user of Digital Item. Since the user generally configures item through multi-step and so layered definition of choice is required, this choice is modeled in a recurrent form (paragraph block 0049), which meet the limitation of **the DIAinDID descriptor includes a "TargetChoice" and a target choice condition.**

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Chang et al. with that of Song et al. because such a combination would provide the users of Chang et al. with a Digital Item definition model with flexibility, consistency and compatibility required in the electronic commerce environment (paragraph block 0010).

18.   **Regarding independent claim 17**, Chang et al. teach that since the size of the communication speed of the user in the first CHOICE is comparable with others, it is defined with the PRECEDENCE (paragraph block 0082), which meet the limitation of **describing a "SpecifiedPrecedence" or a "BaseChoice" to the "ChoicePrecedenceClass"**.

Chang et al. do not explicitly teach **describing a "TargetChoice" of the digital item, a condition if necessary, and a "ChoicePrecedenceClass"**; and

Song et al. teach that Choice 104b is used for item 104 level required for selective configuration satisfying a request of user of Digital Item. Since the user generally configures item through multi-step and so layered definition of choice is required, this choice is modeled in a recurrent form (paragraph block 0049), which meet the limitation of **describing a "TargetChoice" of the digital item, a condition if necessary, and a "ChoicePrecedenceClass"**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Chang et al. with that of Song et al. because such a combination would provide the users of Chang et al. with a Digital Item definition

model with flexibility, consistency and compatibility required in the electronic commerce

environment (paragraph block 0010).

19.   Claims 4 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chang et al. (US 20020138495A1) as applied to claim1 above, and further in view of

Vetro (US 20030156108 A1).

20.   **Regarding dependent claim 4**, Chang et al. do not explicitly teach **the DID**

instance document is an original DID instance document.

Vetro teach that FIG. 3 illustrates the concept of digital item adaptation according

to this invention. A digital item 100 is passed through a digital item adapter (paragraph

block 0024), which meet the limitation of **the DID instance document is an original**

DID instance document.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine the invention of Chang et al. with that of Vetro because such a

combination would provide the users of Chang et al. with a method and system that

adapts a digital item by parsing the digital item into a resource and a description of the

resource (paragraph block 0014).

21.   **Regarding dependent claim 5**, Chang et al. do not explicitly teach **the DID**

instance document is a recently adapted DID instance document obtained by

modification just before adaptation.

Vetro teach that FIG. 3 illustrates the concept of digital item adaptation according to this invention. A digital item 100 is passed through a digital item adapter 300 to yield a modified digital item 101. At the input to the adapter 300, the digital item is parsed 302 to extract the resources 110 and associated descriptors 120 using the structure 130 and, for example, an MPEG-21 DID parser (paragraph block 0024), which meet the limitation of **the DID instance document is a recently adapted DID instance document obtained by modification just before adaptation**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Chang et al. with that of Vetro because such a combination would provide the users of Chang et al. with a method and system that adapts a digital item by parsing the digital item into a resource and a description of the resource (paragraph block 0014).

22.   **Regarding dependent claim 6,** Chang et al. do not explicitly teach **the DID instance document is a newly adapted DID instance document generated by a current adaptive modification**.

Vetro teach that FIG. 3 illustrates the concept of digital item adaptation according to this invention. A digital item 100 is passed through a digital item adapter 300 to yield a modified digital item 101. At the input to the adapter 300, the digital item is parsed 302 to extract the resources 110 and associated descriptors 120 using the structure 130 and, for example, an MPEG-21 DID parser (paragraph block 0024), which meet the

limitation of **the DID instance document is a newly adapted DID instance document generated by a current adaptive modification**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Chang et al. with that of Vetro because such a combination would provide the users of Chang et al. with a method and system that adapts a digital item by parsing the digital item into a resource and a description of the resource (paragraph block 0014).

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following generally relates to digital items and MPEG-21:

Huang, Zhongyang et al.	US 20040139023
Osorio, Roberto et al.	US 20040057386
Huang, Zhongyang et al.	US 20050075998
Wu; Christopher M. et al.	US 6813489
Segur; Shawn Thomas	US 6212550
Guji; Yoshiki et al.	US 6243681
Bormans, Jan et al.	MPEG-21 Use Case Scenario Document

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan Hillery
Examiner
Art Unit 2176

NH